



[7590-01-P]

**NUCLEAR REGULATORY COMMISSION**  
**[Docket Nos. 52-025 and 52-026; NRC-2008-0252]**  
**Southern Nuclear Operating Company Inc**  
**Vogtle Electric Generating Plant Units 3 and 4**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Exemption; issuance.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is issuing an exemption from the requirements of the Commission's regulations that require a written examination and operating test to be requested and administered to 11 operator license applicants at Vogtle Electric Generating Plant (VEGP) Unit 3 in response to a December 20, 2018, request from Southern Nuclear Operating Company (SNC). The NRC is giving these 11 applicants credit for the written examination and operating test they took and passed after they applied for a license to operate Virgil C. Summer Nuclear Station (VCSNS) Unit 2.

**DATES:** This exemption was issued on [INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

**ADDRESSES:** Please refer to Docket ID **NRC-2008-0252** when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document using any of the following methods:

- **Federal Rulemaking Website:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2008-0252**. Address questions about NRC docket IDs in Regulations.gov to Jennifer Borges; telephone: 301-287-9127; e-mail:

Jennifer.Borges@nrc.gov. For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

- **NRC's Agencywide Documents Access and Management System (ADAMS):**

- You may obtain publicly-available documents online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "Begin Web-based ADAMS Search." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov). The ADAMS accession number for each document referenced (if it is available in ADAMS) is provided the first time that it is mentioned in this document. The request for the exemption was submitted by letter dated December 20, 2018 and is available in ADAMS under Package Accession No. ML19030A226. The request was supplemented by letter dated March 4, 2019, and April 16, 2019 (ADAMS Accession Nos. ML19063B575 and ML19121A504, respectively).

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

**FOR FURTHER INFORMATION CONTACT:** Chandu Patel, Office of New Reactors, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-3025; e-mail: Chandu.Patel@nrc.gov.

**SUPPLEMENTARY INFORMATION:**

**I. Background**

Southern Nuclear Operating Company, Inc., Georgia Power Company, Oglethorpe Power Corporation, MEAG Power SPVM, LLC, MEAG Power SPVJ, LLC, MEAG Power SPVP, LLC, and the City of Dalton, Georgia (collectively SNC) are the holders of facility Combined License (COL) Nos. NFP-91 and NPF-92, which authorize the construction and operation of VEGP Units 3 and 4. The COLs, issued under part 52 of title 10 of the *Code of Federal Regulations* (10 CFR), provide, among other things, that the facilities are subject to all rules, regulations, and orders of the NRC or the Commission now or hereafter in effect. The facilities consist of two Westinghouse Electric Company (Westinghouse) AP1000 pressurized-water reactors (PWRs) located in Burke County, Georgia.

Appendix D of 10 CFR part 52, “Design Certification Rule for the AP1000 Design,” constitutes the standard design certification for the Westinghouse AP1000 design, in accordance with 10 CFR part 52, subpart B. “Standard design” is defined in 10 CFR 52.1 as, “a design which is sufficiently detailed and complete to support certification or approval in accordance with subpart B or E of this part, and which is usable for a multiple number of units or at a multiple number of sites without reopening or repeating the review.”

Like VEGP Units 3 and 4, VCSNS Units 2 and 3 were also Westinghouse AP1000 PWRs under construction. The COLs for VCSNS Units 2 and 3 were issued to South Carolina Electric & Gas Company (SCE&G) and South Carolina Public Service Authority (Santee Cooper). After construction of VCSNS Units 2 and 3 ceased in July 2017, SNC hired 11 former VCSNS Unit 2 operator license applicants who had previously passed both an NRC written examination and an operating test for VCSNS Unit 2. These 11 applicants each received a notification letter (i.e., a “pass letter”) from the NRC following their satisfactory completion of the written examination and operating

test for VCSNS Unit 2. NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 11, Section ES-501, "Initial Post-Examination Activities," explains the purpose of the notification letter as follows:

*A Notification Letter* is issued if an applicant has passed the requisite written examination and operating test in accordance with 10 CFR 55.41 and 55.45 or 55.43 and 55.45, and the applicant's general medical condition meets the minimum standards under 10 CFR 55.33(a)(1) or may be accommodated with appropriate conditions under 10 CFR 55.33(b), but the applicant has not to-date completed all the elements of 10 CFR 55.31. This letter notifies the applicant that his or her license will be issued when the incomplete (deferred) items are resolved. The regional office will issue a license when the applicant and/or facility licensee, as appropriate, completes the deferred items.

Construction of VCSNS Units 2 and 3 ceased before the 11 former VCSNS Unit 2 operator license applicants completed all of the requirements in 10 CFR 55.31, and therefore they did not receive licenses to operate VCSNS Unit 2.

## **II. Request/Action**

Pursuant to 10 CFR 55.11, "Specific exemptions," by letter dated December 20, 2018, as supplemented by letters dated March 4, 2019, and April 16, 2019, SNC requested an exemption from the requirements in 10 CFR 55.31(a)(3) and 10 CFR 55.33(a)(2) on the behalf of the 11 former VCSNS Unit 2 operator license applicants that SNC hired following cessation of construction of VCSNS Units 2 and 3. SNC also requested on the behalf of these 11 applicants that their pass letters for VCSNS Unit 2 be transferred to VEGP Unit 3. Enclosure 1 of the December 20, 2018, letter contains SNC's justification for the requested exemptions.

Enclosure 2 of the April 16, 2019, letter identifies the 11 former VCSNS Unit 2 reactor operator license applicants by name and docket number.

10 CFR 55.31(a)(3) requires each applicant for an operator's license to submit a written request that the written examination and operating test be administered to the applicant. This written request must come from an authorized representative of the facility licensee by which the applicant will be employed. Section 55.33(a)(2) states in part that the Commission will approve an initial application for a license if it finds that the applicant has passed the requisite written examination and operating test in accordance with 10 CFR 55.41 and 55.45 or 55.43 and 55.45. The written exams and operating tests determine whether an applicant for an operator's license has learned to operate a facility competently and safely, and additionally, in the case of a senior operator, whether the applicant has learned to direct the licensed activities of licensed operators competently and safely. Written exams administered to operator candidates must contain a representative sample of the topics listed in 10 CFR 55.41(b)(1) – (14), and additionally, written exams administered to senior operators must contain a representative sample of the topics listed in 10 CFR 55.43(b)(1) – (7). Operating tests must contain a representative sample of the topics listed in 10 CFR 55.45(a)(1) – (13).

Additionally, 10 CFR 55.40(a) requires the Commission to use the criteria in NUREG-1021 in effect 6 six months before the examination date to prepare the written examinations required by 10 CFR 55.41 and 55.43 and the operating tests required by 10 CFR 55.45 and to evaluate the written examinations and operating tests prepared by power reactor facility licensees. Preparing the written examinations and operating tests using the appropriate knowledge and abilities catalog, in conjunction with NUREG-1021, ensures that the written exams and operating tests include a representative sample of the items specified in 10 CFR 55.41, 55.43, and 55.45.

NUREG-2103, "Knowledge and Abilities Catalog for Nuclear Power Plant Operators: Westinghouse AP1000 Pressurized-Water Reactors," was developed specifically for Westinghouse AP1000 PWRs. NUREG-1021, Section ES-102, "Purpose and Format of Operator Licensing Examination Standards," states that NUREG-2103 "provides the basis for developing content-valid licensing examinations for operators at Westinghouse AP-1000® PWRs." NUREG-1021, Appendix A, "Overview of Generic Examination Concepts," explains the concept of content-validity and states, "In the case of the NRC examinations, the intent is to measure the examinee's knowledge and ability (K/A) such that those who pass will be able to perform the duties of a reactor operator (RO) or senior reactor operator (SRO) to ensure the safe operation of the plant....In order to develop valid examinations, the K/As selected for testing must be linked to and based upon a description of the most important job duties." To that end, the K/A statements in each of the NRC's K/A catalogs have been rated for their importance to ensure that the plant is operated in a manner consistent with the health and safety of plant personnel and the public. The rating scale is from 1 to 5, where a 5 is considered essential to safe operation. Only K/As with an importance rating of 2.5 or higher are considered appropriate content for written examinations and operating tests (unless there is a site-specific priority that justifies use of the K/A with an importance rating below 2.5).

In accordance with the guidance in NUREG-1021, Section ES-401N, "Preparing Initial Site-Specific Written Examinations," a sample plan needs to be prepared for each written examination. Section ES-401N states, "Systematically and randomly select specific K/A statements (e.g., K1.03 or A2.11) from NUREG-2103 (for AP-1000®)... to complete each of the three tiers (i.e., Tier 1, "Emergency and Abnormal Plant Evolutions"; Tier 2, "Plant Systems"; and Tier 3, "Generic Knowledge and Abilities") of the applicable examination outline." For the AP1000, NUREG-1021, Form ES-401N-2, "AP-1000®

Examination Outline,” is the applicable examination outline. Once the written examination outline is complete, written examination questions can be developed from the K/A statements selected for the examination as documented on the examination outline.

The K/A catalog is also used to select topics for the operating test, which consists of an individual walkthrough portion and a simulator test. The individual walkthrough examinations are commonly referred to as “job performance measures” (JPMs). The individual walkthrough portion of the operating test consists of two parts, “Administrative Topics” and “Control Room/In-Plant Systems,” each of which focuses on specific K/As. In accordance with the guidance in NUREG-1021, ES-301, “Preparing Initial Operating Tests,” K/As for the administrative topics shall be selected from Section 2 of the applicable NRC K/A catalog. The administrative topics are conduct of operations, equipment control, radiation control, and the site’s emergency plan and implementing procedures. The administrative topics identified in Section 2, “Generic Knowledges and Abilities,” of NUREG-2103 are also sampled on the written examination. Appendix B, “Written Exam Guidelines,” and Appendix C, “Job Performance Measure Guidelines,” of NUREG-1021 contain guidance for preparing and evaluating written examination questions and job performance measures, respectively.

### **III. Discussion**

Pursuant to 10 CFR 55.11, the Commission may, upon application by an interested person, or upon its own initiative, grant exemptions from the requirements of the regulations of 10 CFR part 55 as it determines are authorized by law, will not endanger life or property, and are otherwise in the public interest.

1. The exemption is authorized by law

Exemptions are authorized by law where they are not expressly prohibited by statute or regulation. A proposed exemption is implicitly “authorized by law” if all the conditions listed therein are met (i.e., will not endanger life or property and are otherwise in the public interest) and no other provision prohibits, or otherwise restricts, its application. No provisions in law restrict or prohibit an exemption to the requirements concerning written examinations and operating tests; the “endanger” and “public interest” factors are addressed in the next sections in this notice.

The regulations in 10 CFR part 55 implement Section 107 of the Atomic Energy Act of 1954, as amended (AEA), which sets requirements upon the Commission concerning operators’ licenses and states, in part, that the Commission shall “prescribe uniform conditions for licensing individuals as operators of any of the various classes of ... utilization facilities licensed” by the NRC.

Preparing and evaluating operator examinations using the criteria in NUREG-1021 is a means of ensuring the equitable and consistent administration of operator licensing examinations for all applicants and thus helps to ensure uniform conditions exist for the operator licensing examinations administered as part of the licensing process. The 11 former VCSNS Unit 2 operator license applicants identified in Enclosure 2 of the letter dated April 16, 2019, took and passed an NRC written examination and operating test for VCSNS Unit 2, which was prepared and evaluated using the criteria in NUREG-1021. The initial NRC written exams and operating tests administered to applicants for VEGP Unit 3 were also prepared and evaluated using the criteria in NUREG-1021. Therefore, these 11 applicants took and passed an NRC written examination and operating test that was of the same structure, scope, and format as those administered to the operator license applicants at VEGP Unit 3. Also, the same K/A catalog was used to develop the written exams and operating tests administered to



operator license applicants at both VCSNS Unit 2 and VEGP Unit 3, and therefore written exams and operating tests administered at both sites included a representative sample of content-valid topics for the AP1000 design; the sample of K/As used to develop written exams and operating tests administered for VCSNS Unit 2 could also have been used to develop exams administered for VEGP Unit 3, and vice versa.

The staff considered whether any differences in the design and operation of the plant systems at VCSNS Unit 2 and VEGP Unit 3 would result in significant differences between the simulators used to administer the operating tests at VCSNS Unit 2 and VEGP Unit 3 at the time that the 11 applicants received pass letters. Because the AP1000 is designed to be a standard plant, VCSNS Unit 2 and VEGP Unit 3 were similar in their design and operation. As discussed in Enclosure 1, Section 4.0, of the letter dated December 20, 2018, the staff approved the simulators at VEGP Unit 3 and VCSNS Unit 2 as Commission-approved simulation facilities as discussed in two safety evaluations (ADAMS Accession Nos. ML16070A301 and ML16203A116, respectively). In those safety evaluations, the staff concluded that the VCSNS Unit 2 simulation facility and the VEGP Unit 3 simulation facility each demonstrated sufficient scope and fidelity with the AP1000 reference plant design control document (DCD) to support approval of the simulation facilities at both sites for the equitable and consistent administration of operator licensing examinations. The plant combined licenses for VCSNS Unit 2 (ADAMS Accession No. ML14100A092) and VEGP Unit 3 (ADAMS Accession No. ML14100A106) state that the COL applications for both sites incorporate by reference appendix D to 10 CFR part 52, which approves Revision 19 of the AP1000 DCD (ADAMS Package Accession No. ML11171A500) (i.e., the reference plant DCD). The safety evaluations also state that the staff determined that the simulation facilities for both VEGP Unit 3 and VCSNS Unit 2 model the AP1000 plant systems and also

contains the alarms, indications, and controls needed to operate the AP1000 plant systems. Thus, the staff concludes that the simulation facilities used to administer the operating tests to the 11 former VCSNS Unit 2 applicants and the VEGP Unit 3 applicants each sufficiently modeled the AP1000 plant systems, alarms, indications, and controls.

In Enclosure 1, Section 2.0, "Detailed Description," of the letter dated December 20, 2018, SNC explained that the operator training programs for VCSNS Unit 2 and VEGP Unit 3 were similar and stated, "The AP1000 is designed to be a standard plant. VCSNS Unit 2 and VEGP Unit 3 are of similar age and power level, and share the same vendor and similar design. Training material (e.g., lesson plans, simulator scenarios, operating procedures) for operators at VCSNS Unit 2 and VEGP Unit 3 was created jointly by SNC and SCE&G using common procedures and references provided to the utilities by Westinghouse." SNC also stated in Enclosure 1, Section 4.0, "Technical Justification of Acceptability," of the letter dated December 20, 2018, "Examinations and tests were developed to assess the knowledge, skills, and abilities needed by operators to perform assigned tasks common to both VCSNS Unit 2 and VEGP Unit 3." Also, in Enclosure 1, Section 4.0 of the letter dated December 20, 2018 and in the letter dated March 4, 2019, SNC explained that VEGP Unit 3 instructors who are certified as senior operators and former VCSNS Unit 2 senior operator candidates conducted a line-by-line comparison of the operator and senior operator task lists for both sites. SNC found that all the VEGP Unit 3 tasks were included on the VCSNS Unit 2 task list. Thus, the 11 former VCSNS Unit 2 operator license applicants were trained to perform the same tasks as the operator license applicants at VEGP Unit 3 during the training they received prior to taking the NRC written examination and operating test. However, SNC also explained that some procedures cited in the task statements on the task lists for VCSNS

Unit 2 were different than the procedures cited in the task lists for VEGP Unit 3. Testable differences (i.e., those tasks with K/As rated 2.5 or more in the K/A catalog) were limited to site-specific emergency planning and “conduct of operations” procedures, which include topics related to plant control, configuration management, and administration of duties onsite. Specifically, at a public meeting on December 6, 2018 (ADAMS Accession No. ML18340A087), SNC listed each of the VEGP Unit 3 procedures that were included in the training provided to the 11 applicants.

Because the site-specific emergency planning and conduct of operations procedures were different at each site, the 11 former VCSNS Unit 2 operator license applicants may have been trained to perform tasks necessary to implement the emergency plan and tasks discussed in the conduct of operations procedures differently than the VEGP Unit 3 applicants. Also, because there are K/As related to emergency plan implementing procedures (EPIPs) and conduct of operations topics in Section 2 of NUREG-2103, the written examination questions and administrative JPMs developed from those K/As may have tested knowledge, skills, and abilities necessary to perform tasks at VCSNS Unit 2 not relevant to VEGP Unit 3.

Therefore, the staff concludes that the portions of the written exams and operating tests administered at VCSNS Unit 2 that did not include K/As from Section 2 of NUREG-2103 related to the site-specific emergency plan implementing procedures and conduct of operations topics are also relevant to the design and operation of VEGP Unit 3. Thus, for those portions of the exams unrelated to site-specific emergency plan implementing procedures and conduct of operations topics, the 11 individuals have taken and passed a written examination and operating test that demonstrates that they have learned to operate VEGP Unit 3, similar to the VEGP Unit 3 operator license applicants who have passed a written examination and operating test.

As discussed in the next section in this notice, SNC provided training to the 11 individuals on the VEGP Unit 3 emergency planning and conduct of operations procedures and administered exams that the staff has determined are sufficient to evaluate the 11 applicants' competency on these topics. Thus, the staff concludes that these 11 applicants demonstrated that they have learned to implement the VEGP Unit 3 emergency plan procedures and the conduct of operations in a manner similar to how the VEGP Unit 3 operator license applicants did on the NRC written examination and operating test.

For the reasons explained in this notice, the staff concludes that, like the VEGP Unit 3 applicants who have passed an NRC written examination and operating test, the 11 former VCSNS Unit 2 operator license applicants demonstrated that they have learned to perform the duties of an operator or senior operator at VEGP Unit 3 by passing an NRC written examination and operating test at VCSNS Unit 2 and the additional test(s) administered by SNC specifically to address site-specific differences in the emergency plan and conduct of operations procedures. Considering the extent to which the knowledge and abilities associated with the operation of VEGP Unit 3 of the 11 former VCSNS Unit 2 applicants have been assessed consistent with the manner in which VEGP Unit 3 applicants were assessed, the staff concludes that uniformity and consistency under the exemption will be maintained, and granting of the exemption will not alter the basis for the staff's licensing decisions. Accordingly, the staff has determined that granting of the facility licensee's proposed exemption will not result in a violation of the AEA, or the Commission's regulations. Therefore, the exemption is authorized by law.

2. The exemption will not endanger life or property

As stated, in part, in 10 CFR 55.33(a)(2), the Commission will approve an initial application for a license if it finds that the applicant has passed the requisite written examination and operating test in accordance with 10 CFR 55.41 and 55.45 or 55.43 and 55.45. These examinations and tests determine whether the applicant for an operator's license has learned to operate a facility competently and safely, and additionally, in the case of a senior operator, whether the applicant has learned to direct the licensed activities of licensed operators competently and safely. Competent and safe operators protect against endangerment of life or property. Accordingly, where the examination adequately determines who is competent, those exams are protective of and do not endanger life or property.

As discussed in the section in this notice, the 11 former VCSNS Unit 2 operator license applicants took and passed an NRC written examination and operating test at VCSNS Unit 2 that tested K/As that are also relevant to the design and operation of VEGP Unit 3, with two exceptions: written examination questions and administrative JPMs developed from K/As in Section 2 of NUREG-2103 that are related to site-specific emergency plan implementing procedures and conduct of operations procedures may have tested information that is not relevant to VEGP Unit 3 due to differences in those procedures at the two sites. The portions of the VCSNS Unit 2 exams that tested K/As related to the EIPs and conduct of operations procedures are not necessarily relevant to VEGP Unit 3 because the VCSNS Unit 2 procedures were different than those at VEGP Unit 3. Thus, the staff cannot rely on the previous VCSNS Unit 2 written examination and operating test results to conclude that the 11 applicants have demonstrated competency in the VEGP Unit 3 EIPs and conduct of operations.

However, SNC provided training to the 11 applicants on the VEGP Unit 3 EIPs and conduct of operations procedures. In Enclosure 1, Section 4.0, of the December 20, 2018, letter, SNC stated that it trained the 11 applicants on the VEGP Unit 3 EIPs using the same training material that was provided to the VEGP Unit 3 operator license applicants. These 11 applicants also completed self-study of the VEGP Unit 3 conduct of operations procedures; VEGP Unit 3 training instructors were available to assist and answer questions as necessary. Furthermore, in Enclosure 1, Section 4.0, of the December 20, 2018, letter, SNC stated that the 11 former VCSNS Unit 2 operator license applicants and all VEGP Unit 3 applicants who have passed NRC written exams and operating tests have been enrolled in a continuing training program at VEGP Unit 3. The continuing training program uses a systematic approach to training to ensure the applicants maintain proficiency, and it is accredited by the National Academy for Nuclear Training<sup>1</sup>. As discussed in Enclosure 1, Section 2.0, and Section 4.0, of the December 20, 2018, letter, the continuing training program curriculum includes training on design and procedure changes as well as on the site-specific aspects of VEGP Unit 3 plant systems.

Additionally, in Enclosure 1, Section 4.0, of the December 20, 2018, letter, SNC stated that it also administered examinations on the VEGP Unit 3 EIPs and the conduct of operations procedures to the 11 applicants, and each of the 11 applicants passed these examinations. In the March 4, 2019, letter, SNC stated that the minimum passing score for these examinations was 80 percent, which is the minimum passing score, or

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<sup>1</sup> As discussed in NUREG-1021, ES-202, a facility licensee's training program is considered to be approved by the NRC when it is accredited by the National Nuclear Accrediting Board (NNAB). The National Academy for Nuclear Training operates under the auspices of the Institute of Nuclear Power Operations (INPO). It integrates the training efforts of all U.S. nuclear utilities, the activities of the NNAB, and the training-related activities of INPO.

cut score, used on NRC examinations. In the March 4, 2019, letter, SNC also listed the methods it took to establish examination security such that the applicants did not have knowledge of the examination content prior to taking SNC's examinations. These measures included controlling access to the exam content, counting copies of the examinations, informing applicants and instructors not to discuss examination content, and requiring the applicants to sign an examination integrity statement. The staff concludes these methods are consistent with the physical security guidelines for examination integrity in NUREG-1021, ES-201, Attachment 1, "Exam Security and Integrity Considerations," which were established to prevent the applicants from having prior knowledge of the content on NRC examinations.

In Enclosure 1 of the April 16, 2019, letter, SNC explained how the examinations it administered to these 11 applicants were comparable to the JPMs and written examination questions they would have otherwise taken on an NRC examination at VEGP Unit 3.

The exams that SNC administered to the 11 former VCSNS Unit 2 operator license applicants on the VEGP Unit 3 EIPs and the conduct of operations procedures, immediately following the gap training, included both JPMs and written test questions. The examinations consisted of a 25-question written exam and a 5-part JPM exam. The written exam questions met the standards in NUREG-1021, Appendix B, and the JPM questions met the standards in NUREG-1021, Appendix C. All written test questions and JPMs were based on and linked to K/A items selected from NUREG-2103. The importance rating of each K/A item was equal to or greater than 2.5. The examinations were based on closing the gaps which were identified during the Systematic Approach to Training based gap analysis. The K/As selected for the examinations that SNC administered sampled from all the K/As that SNC identified as testable differences. K/As

from the following sections of NUREG-2103 were sampled: 2.1 Conduct of operations, 2.2 Equipment Control, 2.3 Radiation Control, and 2.4 Emergency Procedures and Emergency Plan. Subsequently, five additional JPMs were administered to the 11 applicants listed in the exemption request. The supplementary JPMs tested the candidates' knowledge of the conduct of operations procedures. These JPM questions were linked to K/As, from Sections 2.1, 2.2, and 2.3 of NUREG-2103, having an importance rating of 2.5 or higher. The questions met the standards in NUREG-1021, Appendix C and were written and administered by trained and experienced instructors. The scores of the supplementary JPMs were combined with the scores of the initial JPMs to provide an overall grade for the JPM exam.

Because conduct of operations topics are tested on the NRC initial examination using written examination questions and JPMs sampled from K/As in Sections 2.1, 2.2, and 2.3 of the K/A catalog, and because the written examination questions and JPMs that SNC developed used the same standards in NUREG-2103, Appendices B and C that are used for NRC initial examinations, the staff concludes that SNC tested the 11 applicants on their knowledge of the VEGP Unit 3 conduct of operations procedures using the same evaluation methods, standards, and passing criteria that is used for the NRC initial examinations. Thus, the written examination questions and JPMs the applicants took and passed on the VEGP Unit 3 conduct of operations procedures were comparable to those they would otherwise take on an NRC examination administered at VEGP Unit 3. Therefore, the staff concludes that SNC sufficiently evaluated the 11 applicants' knowledge of and competency applying the VEGP Unit 3 conduct of operations procedures.

Also, EPIPs are topics tested on the NRC initial examination using written examination questions and JPMs sampled from K/As in Section 2.4 of the K/A catalog.



Although SNC did not administer written examination questions to the 11 applicants to assess their knowledge of the VEGP Unit 3 EIPs, SNC did administer more JPMs to the 11 applicants on the EIP topics than they would have taken on an initial NRC examination at VEGP Unit 3. Because JPMs are task-based evaluation tools that require an applicant not only to demonstrate knowledge of a topic, but also to perform tasks necessary to implement the emergency plan, the staff concludes that JPMs are a sufficient tool to evaluate the applicants' knowledge of the how to implement the VEGP Unit 3 EIPs following the completion of the VEGP Unit 3 EIP training. Because the JPMs that SNC developed used the same standards in NUREG-2103, Appendix C, that are used for NRC initial examinations, the staff concludes that SNC tested the 11 applicants on their knowledge of the VEGP Unit 3 EIPs using the same standards and passing criteria that is used for the NRC initial examinations.

For those differences in plant systems that were not identified to be "testable" in accordance with the licensee's assessment of those K/A's with importance ratings greater than 2.5, the facility licensee will still be required to ensure that the applicants are effectively trained and evaluated in accordance with the facility licensee's Commission approved SAT-based training program. The facility licensee has not requested an exemption of 10 CFR 55.31(a)(4), which states:

Provide evidence that the applicant has successfully completed the facility licensee's requirements to be licensed as an operator or senior operator and of the facility licensee's need for an operator or a senior operator to perform assigned duties. An authorized representative of the facility licensee shall certify this evidence on Form NRC-398, "Personal Qualification Statement -- Licensee." This certification must include details of the applicant's qualifications, and details

on courses of instruction administered by the facility licensee, and describe the nature of the training received at the facility, and the startup and shutdown experience received. In lieu of these details, the Commission may accept certification that the applicant has successfully completed a Commission-approved training program that is based on a systems approach to training and that uses a simulation facility acceptable to the Commission under 10 CFR 55.45(b) of this part.

Therefore, when applying for operator licenses, the facility licensee will need to certify that the applicants have completed the facility's training program in its entirety, which would include training on differences in the design and operation of plant systems between the two facilities and any testing/evaluation inherent to the training program. This approach is similar to the historical NRC approach used when adding a second unit to an operator's license at a plant with two comparable units with limited system differences, as discussed in NUREG-1021, Section ES-204. Through this action, the NRC is exempting only the requirement to pass another NRC-approved examination based on the licensee's certification that the applicants have been re-evaluated on any test items from the VCSNS Unit 2 examination that were not applicable to VEGP Unit 3. SNC will need to certify at a later date when it submits the final operator license applications (i.e., NRC Form 398) that the applicants have been adequately trained and evaluated in accordance with the VEGP Unit 3 training program.

Because the only testable differences were related to EIPs and conduct of operations, the staff concludes the written examinations and operating tests administered to the 11 applicants at VCSNS Unit 2 were equivalent or comparable to those administered to the VEGP Unit 3 applicants for all other testable subjects. Because SNC administered an examination that was comparable in scope and

administration of the NRC examination, staff concludes that SNC provided an adequate mechanism to determine whether the 11 applicants demonstrated competency of the VEGP Unit 3 EIPs and conduct of operations procedures in lieu of having the 11 applicants retake any or all portions of the NRC initial written examination and operating test at VEGP Unit 3. Therefore, the VCSNS Unit 2 examination results plus the results of the examination SNC administered together demonstrate that these applicants have demonstrated that they are competent to operate VEGP Unit 3, and therefore, granting the exemption will not endanger life or property.

3. The exemption is otherwise in the public interest

The Commission's values guide the NRC in maintaining certain principles as it carries out regulatory activities in furtherance of its safety and security mission. These principles focus the NRC on ensuring safety and security while appropriately considering the interests of the NRC's stakeholders, including the public and licensees. These principles include Independence, Openness, Efficiency, Clarity, and Reliability. Whether granting an exemption to the requirement to pass a written examination and operating test at VEGP Unit 3 would be in the public interest depends on the consideration and balancing of the foregoing factors.

Concerning efficiency, the public has an interest in the best possible management and administration of regulatory activities. Regulatory activities should be consistent with the degree of risk reduction they achieve. Where several effective alternatives are available, the option which minimizes the use of resources—which, in turn, minimizes the costs passed on to the public—should be considered acceptable. The 11 applicants each passed a written examination and operating test at VCSNS Unit 2 that was of the same format and scope and that was also similar, to a large degree, in content to the examinations given to the VEGP Unit 3 applicants. As discussed in this

notice, where there were differences that may have been present in the examination content related to EIPs and conduct of operations procedures, SNC implemented sufficient methods to address the significant differences between the two sites.

In Enclosure 1, Section 5.3, of the December 20, 2018, letter, SNC explained that if the exemption is granted, then training resources will be available to meet other site training needs and to ensure trained operations personnel are available to support activities at VEGP Unit 3, including fuel load. The staff will not have to devote resources to preparing and validating additional written examinations and operating tests for these 11 applicants. Also, these 11 applicants will be able to remain in the continuing training program for VEGP Unit 3, which will help to ensure they maintain proficiency in topics included in the initial training program and that they also receive training on any changes made to the plant design or procedures prior to fuel load and plant operation. Therefore, granting the exemption and transferring the pass letters from VCSNS Unit 2 to VEGP Unit 3 is an effective and efficient alternative to requiring the 11 applicants to take a written examination and operating test to be licensed at VEGP Unit 3.

Concerning reliability, once established, regulations should be perceived to be reliable and not unjustifiably in a state of transition. Regulatory actions should always be fully consistent with written regulations and should be promptly, fairly, and decisively administered so as to lend stability to the nuclear operational and planning processes. Here, where the staff has already found that the examinations administered at VCSNS Unit 2 together with the actions SNC has taken to ensure the 11 applicants demonstrated competency to implement the VEGP Unit 3 EIPs and conduct of operations procedures are sufficient to conclude that the 11 applicants have learned to operate VEGP Unit 3 safely and competently, the substantive requirements upon the operator license applicant are unchanged with the granting of the exemption. Further,

the public has an interest in reliability in terms of the stability of the nuclear planning process. This exemption aids planning by allowing the 11 applicants to complete their applications sooner, with the underlying requirements essentially unchanged, and could result in licensing decisions being made earlier than would be possible if the applicants had to wait to take a written examination and operating test at VEGP Unit 3.

Concerning clarity, there should be a clear nexus between regulations and agency goals and objectives whether explicitly or implicitly stated. Agency positions should be readily understood and easily applied. For the reasons explained herein, the examination results from the examinations administered at VCSNS Unit 2 together with the compensatory actions taken by SNC to address knowledge gaps related to EIPs and conduct of operations procedures are sufficient to conclude that these 11 applicants have learned to operate VEGP Unit 3 safely and competently, and therefore the underlying requirements of 10 CFR 55.33(a)(2) are met, and the requirements in 10 CFR 55.31(a)(3) are not necessary.

The exemption is also consistent with the principles of Independence and Openness; the Commission has independently and objectively considered the regulatory interests involved and has explicitly documented its reasons for issuing the exemption.

Accordingly, on balance the Commission concludes that the exemption is in the public interest.

### *Summary*

The Commission concludes that the exemption is (1) authorized by law and (2) will not endanger life or property and (3) is otherwise in the public interest. Therefore, in lieu of the requirements of 10 CFR 55.33(a)(2), the Commission will transfer the pass letters for the 11 applicants listed in Enclosure 2 of the letter dated April 16, 2019, to

VEGP Unit 3, and the requirement in 55.31(a)(3) is therefore not necessary for these 11 applicants.

#### *Limitation*

The granting of this exemption is limited to the 11 applicants identified by docket number in Enclosure 2 of the April 16, 2019 letter.

#### *Environmental Consideration*

This exemption allows the exemption from the requirements of 10 CFR 55.31(a)(3) and 55.33(a)(2), and allows 11 VCSNS Unit 2 operator license applicants to transfer their pass letters for VCSNS Unit 2 to VEGP Unit 3. The staff evaluated whether there would be significant environmental impacts associated with the issuance of the requested exemption. The staff determined the proposed action fits a category of actions that do not require an environmental assessment or environmental impact statement.

For the following reasons, this exemption meets the eligibility criteria of 10 CFR 51.22(c)(25) for a categorical exclusion. The exemption does not make any changes to the facility or operating procedures and does not:

- alter the design, function or operation of any plant equipment. Therefore, granting this exemption would not increase the probability or consequence of any previously evaluated accident.
- create any new accident initiators. Therefore, granting this exemption does not create the possibility of a new or different kind of accident from any accident previously evaluated.
- exceed or alter a design basis or safety limit. Therefore, granting this exemption does not involve a significant reduction in a margin of safety.

Therefore, there is no significant hazards consideration related to this exemption. The staff has also determined that the exemption involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite; that there is no significant increase in individual or cumulative public or occupational radiation exposure; that there is no significant construction impact; and that there is no significant increase in the potential for or consequences from radiological accidents. Finally, the requirements to which the exemption applies involve qualification requirements. Accordingly, the exemption meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(25). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the exemption.

#### **IV. Conclusion**

Accordingly, the Commission has determined that, pursuant to 10 CFR 55.11, issuing this exemption from the requirements in 10 CFR 55.33(a)(2) and 10 CFR 55.31(a)(3) is authorized by law and will not endanger life or property and is otherwise in the public interest.

The Commission will also transfer the pass letters from VCSNS Unit 2 to VEGP Unit 3 for the 11 former VCSNS Unit 2 operator license applicants.

Dated at Rockville, Maryland, this 31<sup>st</sup> day of May 2019.

For the Nuclear Regulatory Commission.

Anna H. Bradford, Deputy Director,  
Division of Licensing, Siting,  
and Environmental Analysis,

